



Fairfax County

Solid Waste Management Program

Promoting Clean Communities & Environmental Stewardship





County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

Dear Reader,

Fairfax County's Solid Waste Management Program is responsible for providing a comprehensive system for recycling, collecting, and disposing of solid waste that serves over one million people. Our program is part of the county's Department of Public Works and Environmental Services. We combine state-of-the-art facilities, energetic employees, and a strategically driven focus to achieve excellence in managing solid waste in our community. We work to engage the community as active partners in keeping Fairfax County clean.

Together, the Division of Solid Waste Collection and Recycling and the Division of Solid Waste Disposal and Resource Recovery operate an integrated solid waste management system that manages more than 1.5 million tons of solid waste each year. We also respond to disaster clean-ups, support community beautification initiatives, and enforce the Fairfax County solid waste management ordinance and policies.

Our program earns more than 99 percent of our program's operating budget through user fees for disposal and recycling services and county refuse collection service.

Located in one of the nation's fastest-growing metropolitan areas, our program anticipates change and uses a strategic approach in planning for the future of solid waste management.

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Division of Solid Waste
Collection & Recycling

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VIRGINIA
ENVIRONMENTAL EXCELLENCE
PROGRAM

Department of Public Works and Environmental Services
Solid Waste Management Program
12000 Government Center Parkway, Suite 458
Fairfax, Virginia 22035



25 Years of Solid Waste Management

1982

- I-66 Landfill closed to trash.
- I-66 Transfer Station begins operations.
- I-95 Landfill becomes primary disposal location.

1987

- Contract for Covanta Fairfax energy-from-waste facility.
- First four recycling drop-off centers open; program increased to eight locations by 1996.

1990

- Covanta Fairfax energy-from-waste facility begins operations.
- Fairfax County starts curbside recycling program: newspapers, glass bottles, and metal food and beverage containers must be recycled.
- First landfill gas-to-energy project is implemented at the I-95 landfill.

1991

- Comprehensive Solid Waste Management Plan adopted.

1995

- Fairfax County starts business recycling program.
- I-95 Landfill closed to trash, ending the practice of landfilling of municipal solid waste in Fairfax County.

1997

- Energy generated from landfill gas is used by the Noman Cole Wastewater Treatment Plant.

2004

- Fairfax County adopts new 20-year Solid Waste Management Plan.

2006

- Curbside recycling program expanded to include plastic bottles, mixed paper, and cardboard.
- Board of Supervisors adopts revised Chapter 109.1 of the Fairfax County Code.
- Enforcement program formalized and implemented.
- Business recycling program to require recycling in all non-residential and multifamily properties.

2007

- Chapter 109.1 of the Fairfax County Code goes into full effect, the first step to comprehensive recycling for all of Fairfax County.
- Landfill gas-to-energy project developed at the closed I-66 Landfill.
- Final cap installation completed at the I-95 Municipal Solid Waste Landfill site.



Refuse Collection

The Division of Solid Waste Collection and Recycling provides refuse and recycling collection service to approximately 45,000 households in established sanitary districts, all county agency buildings and eight recycling drop-off centers.

County residents may petition the Board of Supervisors to receive refuse and recycling service from Fairfax County. County collection service is a fee-for-service program and is not funded by the Fairfax County general budget.

Our program maintains a fleet of refuse packers and crane trucks with an operational staff of 135 men and women. In addition to normal refuse collection, we respond with refuse collection service in cases of illegally dumped waste, storm debris, and waste generated from other emergency situations and disasters.

Residents residing outside established sanitary districts receive refuse and recycling collection service from one of more than 30 privately-owned service providers operating within Fairfax County. The Fairfax County Code establishes a set of service standards that must be provided to all residential and non-residential customers.

The Solid Waste Management Program enforces all policies and regulations associated with the collection, transfer, and disposal of refuse and recyclables. Our enforcement branch investigates reported illegal activities including the illegal dumping of waste and the mixing of refuse and recyclables.



Disposal

Each year, approximately 1.5 million tons of refuse is generated in Fairfax County. The Division of Solid Waste Disposal and Resource Recovery operates two facilities which play a critical role in the transportation and disposal of refuse and the recovery of reusable/recyclable materials: the I-66 Transfer Station located in Fairfax, and the I-95 Landfill Complex located in Lorton.

The I-66 Transfer Station, on West Ox Road in Fairfax, is the primary trash disposal site for approximately 75 percent of the waste collected in Fairfax County. Trash is consolidated from collection vehicles into tractor-trailers for transport to the energy-from-waste facility or other permitted disposal facility. By consolidating two to three trash truckloads into

one tractor-trailer, we lower costs, minimize truck traffic, reduce fuel consumption and air pollution.

The I-95 Landfill Complex is located on Furnace Road in Lorton. Both the I-66 Transfer Station and the I-95 Landfill Complex contain a Citizens' Disposal Facility where residents may dispose of their household trash and recyclables themselves. There is a fee for trash disposal while recycling is free. Both of these facilities also have recycling locations for "white goods" (appliances and scrap metal items), lead-acid batteries, and household hazardous waste. Additionally, each facility contains a mulching operation, where tree debris and yard waste is ground into mulch and made available to residents at no cost.





Recyclables

Recyclables collected from residences, businesses and recycling drop-off centers are taken to a recycling facility for processing and sale.



White Goods (metal, appliances, etc.) & Tires

Used tires are ground for recycling at the I-95 Landfill Complex. Metals are collected separately and sold as scrap.



Hazardous Waste

Hazardous waste is collected at permanent sites in the I-66 Transfer Station and I-95 Landfill Complexes, then sent for recycling or disposal in compliance with EPA and DEQ standards.



of Waste



Trash

Seventy-five percent of all trash collected first goes to the I-66 Transfer Station to reduce truck traffic and enhance efficiency. The remaining 25 percent of trash is transported directly to the energy-from-waste facility in Lorton, Virginia.



Energy-From-Waste

Trash is converted to electricity at the energy-from-waste facility. This process generates enough electricity to power 75,000 homes.



Yard Waste (Brush, Grass, Leaves)

Yard waste is collected separately. Brush and leaves may be ground into mulch at either the I-66 Transfer Station or the I-95 Landfill Complex and made available to county residents at no cost. Grass and bagged leaves are transported off-site for composting.

Energy-From-Waste

“Looking Forward” is Fairfax County’s approach to solid waste management, and this approach resulted in the decision to manage waste using an energy-from-waste facility. The energy-from-waste facility is located at the I-95 Landfill Complex. Waste is combusted at high temperatures to recover energy that is sold to the local power company. This process generates about 80 megawatts of electricity - enough energy to power 75,000 homes and the facility itself. The combustion process also reduces waste volume by 90 percent. The resulting inert ash is placed in a modern landfill designed to protect the environment.

Air emissions from the energy-from-waste facility have consistently been below the state and federal limits. State-of-the-art upgrades to the air pollution control equipment were added in 2000. Energy-from-waste technology is a renewable resource that reduces greenhouse gas emissions because it replaces the combustion of fossil fuels that would otherwise be used for energy production. The county’s commitment to reducing air emissions can also be seen in the daily use of electric utility vehicles at both the I-66 Transfer Station and the I-95 Landfill Complex.



Recycling

Since 1988, Fairfax County has supported both residential and commercial recycling programs with over 6 million tons of recyclables collected in the county. Recycling is essential for ensuring the long-term disposal capacity for non-recyclable materials. Fairfax County is successful in preserving disposal capacity by recycling about 35 percent of all waste generated. Collected recyclables also generate revenue that is used to support the overall waste management program.

In response to the community's overwhelming support of recycling, Fairfax County initiated a comprehensive recycling program for the entire county by requiring everyone to recycle paper and cardboard, whether at home or at work.



Community Outreach

The Solid Waste Management Program engages members of the community as active partners in waste management through public education initiatives in schools and community organizations and by participating in a wide variety of events.

We participate in environmental education in county schools and sponsor a variety of programs for students. Most notably, we support the Johnnie Forte, Jr. Litter and Recycling Grant Program, which provides funding to schools for environmental projects.

Additionally, each year, we sponsor several community recycling and outreach events. These events provide opportunities to increase awareness of our program among residents and help them recycle and reuse unwanted items by donating them to local charities.





Beyond the Bin

Many of the items people discard can cause harm if they are emitted into our environment. These items, collectively referred to as household hazardous waste (HHW), include pesticides, herbicides, motor oil, fluorescent lamps and bulbs, rechargeable batteries, paint, and other chemicals that could cause harm if released into the environment. Fairfax County's HHW Program provides an opportunity for residents to dispose of hazardous materials safely in an environmentally-responsible manner at no charge.

Fairfax County's HHW Program has two permanent HHW collection sites (at both the I-66 Transfer Station and the I-95 Landfill Complex) and we also host collection events at various locations throughout the county each year. The I-66 Transfer Station site also hosts three Business Hazardous Waste Clean-up Days each year to make reasonably-priced disposal available to businesses.

With environmental protection being our program's main focus, we have established recycling programs for obsolete electronics, rechargeable batteries, fluorescent lamps and other materials. We also participate in the regional "KnowToxics" campaign (www.knowtoxics.com) designed to provide information about managing these items.

Landfill Gas-to-Energy

Prior to the construction of the energy-from-waste facility, the county used landfilling as its primary means of solid waste disposal. While this practice ended when the I-66 Landfill in Fairfax and the I-95 Landfill in Lorton stopped accepting municipal solid waste, we still must monitor these facilities closely. As buried waste decomposes, landfills generate a gas composed of 50 percent methane and 50 percent carbon dioxide. Rather than simply control this gas through combustion, we utilize the gas as an energy source through a series of recovery projects.

The landfill gas-to-energy project at the I-95 Landfill uses the recovered landfill gas to generate more than six megawatts of electricity—enough to power 6,000 homes. In addition, a three-mile pipeline carries landfill gas to the nearby Noman Cole Wastewater Treatment Plant where it is used as a substitute for natural gas in the wastewater treatment process.

At both the I-95 and I-66 landfills, gas is also collected and used instead of natural gas for heating on-site buildings. As a substitute for fossil fuel, our landfill gas-to-energy projects reduce Fairfax County's carbon dioxide emissions by over 300,000 tons per year.





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Department of Public Works and Environmental Services

Solid Waste Management Program

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I-66 Transfer Station Complex

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Fairfax, VA 22030

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I-95 Landfill Complex

9850 Furnace Road

Lorton, VA 22079

Phone: (703) 690-1703, TTY 711



Fairfax County is committed to a policy of nondiscrimination in all county programs, services, and activities and will provide reasonable accommodations upon request. To request special accommodations, call the Solid Waste Management office at 703-324-5230, TTY 711.

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